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EXTENSION WORK IN COOPERATIVE MARKETING

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INTRODUCTION

Extension work in marketing is an integral part of the Federal, State, and county extension programs. It involves assisting farmers to coordinate their production methods so that there will be an adequate supply of farm products such as the market demands. Thus, the net result of the farmers' production and marketing program will be a farm organization and a plan of operation which will yield the highest possible net return.

The agricultural college marketing economist is the State leader in marketing extension work. It is his duty to make available, through the State and county extension organization and through the cooperative-marketing associations, information that will assist farmers in the solution of their production and marketing problems. He assists in supplying the economic background of facts on which the extension program in individual States, counties, and communities may safely be built. At the same time, he helps to develop extension methods.

The problem of the marketing extension economist, then, becomes that of a teacher of more efficient marketing methods. He must, under ever-changing conditions, keep the farmer informed as to the best market outlets for his farm products, as well as teach him how to use available sources of information, so that he will learn to determine for himself the best market outlets for his products.

[1] This circular is based on a study made by the Division of Cooperative Marketing, Bureau of Agricultural Economics, in cooperation with the Extension Service of the U. S. Department of Agriculture. The Division of Cooperative Marketing was transferred by Executive order, Oct., 1, 1929, from the Department of Agriculture to the Federal Farm Board.

PRESENT SCOPE

During the year 1928–29, 24 States employed 47 full-time extension marketing economists. Twelve of the 24 States employed 1 full-time marketing extension economist each, 11 of the 24 States employed 2 to 4, and Iowa had 8; a total of 10 States employed 16 part-time extension economists in marketing. In other words a total of 27 States had either part-time or full-time extension economists in marketing, leaving 21 States with no extension man in marketing.

Twenty States made no appropriations for marketing extension, and 15 States appropriated less than $4,500 for the year 1928–29. This does not mean that in the 20 States that did not make appropriations and in the Territories of Hawaii and Alaska nothing was done in marketing. Many of these States are the smaller or less prosperous ones, and marketing work was handled by the director of extension or by some other extension official, along with his other duties. Some of these States were considering increased appropriations for marketing activities, and others had asked for funds in order to start extension work in marketing.

Two reasons are apparent for the small appropriations in 15 States and for no appropriation in 20 States: (1) There was difficulty in getting trained men for the work, and (2) in some States the extension workers had had little economic training.

Since 1925–26 appropriations for extension work in marketing had increased slowly. For the year 1928–29, $244,150 was appropriated for this purpose, as compared with $1,926,373 appropriated for production specialists in animal husbandry, dairying, poultry production, horticulture, and agronomy. In other words, of the total appropriations of $2,170,523 for extension specialists in these six lines, only 11¼ per cent was appropriated for marketing purposes, while 88¾ per cent was appropriated for production work. Until the present time this inequality has not been of consequence, in as much as the products have found ready sale. Conditions are different now; with overproduction in many commodities, the task of marketing farm products efficiently has become as difficult as, if not more difficult than, efficient production and will require the assistance of increasing numbers of trained marketing men until more efficient marketing machinery has been developed for the selling of all farm products.

Allotments of funds from all sources for cooperative extension work in 48 States and Hawaii for 1928–29 amounted to $22,492,646. Altogether, 5,679 persons were employed in the States and 12 in Hawaii on June 30, 1929, to carry on State and county extension work. Of this number, 4,170 were located within counties and included 2,264 white county agents, 188 assistant county agents, 172 negro men agents, 1,167 white county home demonstration agents and assistants, 125 negro home demonstration agents, and 254 county boys' and girls' club agents. There were 1,037 specialists employed to assist the county extension agents in technical and commodity matters. Of this total force, 63 were full-time or part-time marketing economists. Table 1 shows the increase in State extension workers from July 1, 1924, to June 30, 1929.

TABLE 1.—*Number of extension specialists, home demonstration agents, and county agricultural agents in the United States, 1924–25 to 1929–30*

Employees	1924–25	1925–26	1926–27	1927–28	1928–29	1929–30
Full-time marketing economists	39	34	38	45	47	50
Part-time marketing economists	9	9	7	8	16	14
Total marketing economists	48	43	45	53	63	64
Total other specialists	882	939	932	951	974	1,036
Total home demonstration agents	987	989	1,020	1,049	1,292	1,352
Total county agricultural agents and assistants	2,335	2,384	2,427	2,478	2,624	2,755

Seventy-five State directors and assistant directors were charged with the administrative responsibility for all State work.

MARKETING ACTIVITIES OF COUNTY EXTENSION AGENTS

Of the 5,679 State agricultural extension workers teaching farmers of the United States the results of years of experimental and research work in production and marketing, 4,170 were county extension agents. In Table 2 their activities in marketing work during the eight years, 1921-1928, are summarized.

TABLE 2.—*Marketing work reported by county extension agents, 1921–1928*

Item	1921	1922	1923	1924
New cooperative associations assisted in organization	[1] 1,701	[1] 934	1,853	979
Cooperative associations assisted or cooperated with	7,352	7,429	6,262	3,116
Value of business done by all associations and individuals assisted ... dollars	360,831,393	255,800,130	321,031,854	233,375,494
Cooperative extension agents reporting marketing work	754	1,549	1,322	995
Percentage of time spent on agricultural economics by agents and specialists	[1] 7.7	----------	4.3	4.0

Item	1925	1926	1927	1928
New cooperative associations assisted in organization	973	926	1,021	942
Cooperative associations assisted or cooperated with	3,267	3,106	3,434	3,211
Value of business done by all associations and individuals assisted ... dollars	215,951,832	232,340,696	239,858,703	233,202,395
Cooperative extension agents reporting marketing work	1,165	1,455	1,550	1,642
Percentage of time spent on agricultural economics by agents and specialists	3.9	4.0	4.1	4.0

[1] North only.

During 1928, 555 county agents reported that they had assisted in the organization of 803 cooperative marketing and purchasing associations. For the same year, 111 home demonstration agents reported that they had assisted in the organization of 138 associations. In other words, 941 cooperative associations were organized in 1928 with the assistance of county extension officials. Furthermore, 1,027 county agents and 114 home demonstration agents reported that they had previously assisted in the organization of 2,269 cooperatives with a total membership of 415,594 farmers, which did a business during the year of more than $213,405,637, of which $42,-

406,893 was purchases and the remainder sales. The total business done by all cooperative marketing associations for 1927–28 was $2,300,000,000. This record is evidence that extension officials have been of material assistance in the development of agricultural cooperation and have been a substantial educational force in the growth of cooperative organizations.

However, when this total is compared with the total value of all farm products marketed, it becomes apparent that extension work in marketing has a broad, almost untouched field of endeavor ahead. The newness of the work and the constantly changing conditions brought about by increased production of the commodity or by increased competition with allied commodities make the part of the extension employee one of extreme interest. He must know, not only local marketing conditions, but world production and marketing conditions and how they affect each other. The fact that, in 1928, 1,642 county agents reported marketing work, as compared with 905 in 1924, shows an increased interest in marketing activities on the part of county agents.

County agents and specialists, during the years 1923 to 1928, spent approximately 4 per cent of their entire time on agricultural economics, as recorded in their annual reports. The term "agricultural economics" includes farm management and marketing. Granting an equal division of time, it would mean that 98 per cent of the county agents' and specialists' time had been devoted to production and 2 per cent to the marketing of the products.[2] There is a growing feeling on the part of extension workers that this is an unequal division of time and that more time must be spent on marketing and the proper coordination of the production and marketing programs so that an increasing percentage of farmers will have definitely in mind the type of product they expect to produce and the market reaction to be expected when it is offered for sale.

Table 2 shows that the information for 1921 and 1922 on "new cooperative associations assisted in organization during the year" is for the Northern States only. The total number of associations assisted or cooperated with during the last three years, however, is for the 48 States. In "county extension agents reporting marketing work," information for the years 1921 and 1922 is for Northern States only, since the information was not obtained in summarized extension reports from the Southern States. This is also true of the percentage of time the agents and specialists spent on agricultural economics for the year 1921. The information does not seem to have been summarized at all for the year 1922.

It should be kept in mind that some of the new cooperative associations which are assisted in organization each year are of rather an informal nature and, therefore, may not be long-lived. As the larger cooperative associations get under way, there is a tendency for them to employ high-grade managers and advisers and to depend less and less upon extension workers for assistance and advice. In such cases, agents soon cease to report information on value of business done and savings or profits, even though the extension agents may have played an important part originally in the organization

[2] Some marketing work conducted in cooperation with production specialists has been reported as extension work in production.

of the association. This situation has accounted, in a large degree, for the apparent gradual decline in the total value of business done by all the associations receiving assistance from the extension service since 1921.

Extension forces have been handicapped during recent years in disseminating marketing facts by the lack of abundant and reliable research material upon which to base their conclusions. The field laboratory of successful cooperative-marketing associations has been in the making and, until recent years, did not furnish many examples of cooperative-marketing associations for each of the commodities, whose activities had extended over a sufficient period of time to serve for comparison. But from the results of the Purnell Act and the studies conducted by the United States Department of Agriculture, Bureau of Agricultural Economics, a real fund of research knowledge is now being obtained.

Many county agents, marketing economists, or other extension employees have been at a loss to know just where they fit into this whole scheme of things and how far they may go to assist farmers or farmer groups in marketing their farm products. With the passage of the act establishing the Division of Cooperative Marketing and by the passage of a more recent agricultural marketing act, establishing the Federal Farm Board, State and Federal employees are given a much wider field of service to farm groups. We now think that our work is only partly completed when every assistance has been given to production, and that it is completed only when extension employees have assisted in furnishing to farmers and farmers' associations all available information which will enable them to sell their farm products and purchase their farm supplies to the best possible advantage. The producer frequently must make a drastic change in production, assembling, packaging, standardizing, transporting, and selling methods in order that the product may meet demands in such a way as to bring the highest possible net returns.

The emergency extension appropriation bill passed by Congress early in 1930 provides additional funds for State and Federal marketing specialists. It is the purpose of this bill that a sum of $10,000 for each State be utilized in marketing extension activities. With this addition to already available funds for marketing work in the States the number of marketing specialists will be materially increased, resulting in a much-needed increase of market information going to farmer groups and making it possible under average conditions to increase their average net returns.

Extension officials who fail to realize the place of cooperation in agriculture and do not work for the development of sound, substantial farmers' organizations are not meeting their fullest obligations to the farmers. They must, however, assure themselves that particular organizations are soundly managed and ask the officials of cooperative associations to work closely with them and keep them advised regarding the operations of the associations.

The Federal and State extension services are eager to extend and strengthen their aid to cooperative-marketing associations. By so doing, they render effective service to farmers whether they are members of cooperatives or not. By working through organized groups, they conserve time and funds and obtain more lasting results. Pri-

marily, extension officials are educators and can not assume responsibility for the organization and direction of cooperative associations, but there are many things which they can do to foster and promote the movement.

OPPORTUNITIES TO FURTHER COOPERATION

Some of the ways in which county agents and extension marketing economists may assist in furthering and strengthening the cooperative movement may here be pointed out.

(1) County agents and extension officials should assist farmers in making surveys of the immediate needs of the community or State. When the needs and the resources of the community or State have been carefully ascertained, from the standpoint of both production and marketing, the farmers should be aided in developing the type of organization best adapted to meet present and anticipated marketing conditions of the community through its market outlets. It is the duty of the Federal, State, and county extension workers to assist farm leaders in the working out of organization plans, in the development of the business set-up of the organization, and in the formulation of financing and marketing policies.

Once the organization is perfected, it then becomes the duty and privilege of the extension worker to make available to the management of the association the results of marketing research carried on by the States and the United States Department of Agriculture, to disseminate crop and market information and approved statistical, accounting, financing, and marketing practices, and to assist the cooperative further in disseminating such information to the producers.

(2) Extension employees should take part in meetings held by cooperative associations. In such meetings they may discuss marketing problems. Emphasis should be placed on the results obtained through cooperative marketing as shown by research studies which were conducted for the purpose of finding out the conditions surrounding the marketing of a particular commodity. Production methods may then be adapted by farmers to the special needs of their market.

(3) County agents, marketing economists, and commodity specialists should conduct educational campaigns and meetings for the purpose of bringing to the farmer the exact needs of the market for his product. They may arrange for demonstrations in packing, processing, and standardizing products handled by cooperative-marketing organizations, particularly emphasizing those phases of the work for which the farmer is responsible. Thus, older methods are sometimes changed for newer ones to meet market demands and to increase returns to the producer.

County agents, marketing economists, and commodity specialists can assist in the promotion of cooperative-marketing schools in connection with marketing associations, agricultural high schools, county farm bureaus, and other agencies. A medium is thus provided through which the farmers of the State or county may attain a correct understanding of the problems and principles involved in marketing and the possibilities and limitations of cooperative marketing.

In short, the extension worker first assists the farmer in setting up his cooperative-marketing machinery, and then helps to keep it in a healthy operating condition by making available to the organization the results of research and membership studies and by giving the benefits of his practical experience gained through work with efficiently operated cooperative associations.

The extension worker is a medium through which information may be obtained. When the cooperative has been given all the guidance possible in its organization, the extension service will, if given an opportunity, continue to help the officials to foresee and solve their problems.

It is relatively easy for local groups in cooperative-marketing associations and local groups of extension workers to cooperate to the fullest extent. There is greater difficulty in maintaining relationship with large-scale organizations which may extend over one or more States. Continued effort on the part of both extension workers and officials of cooperative associations is needed to create and maintain these contacts which make effective to the greatest degree the services of the extension groups.

Extension officials, as a group, are convinced of the soundness of the principles of cooperation. They do, however, need information which will enable them to evaluate the soundness of particular plans and the efficiency of particular organizations. When associations are honestly and efficiently operated in the interest of the producers, lack of contact or misunderstanding should not be allowed to hamper the capacity of the extension workers for service or deprive the cooperatives of assistance which they need and to which they are entitled.

MARKETING EXTENSION WORK BY COMMODITIES

DAIRY PRODUCTS

According to recent annual reports of county extension agents and marketing economists, the marketing of dairy products has commanded a considerable portion of their time. The efforts of the extension employees extend from the most elementary phases of dairying, such as the organization of cream stations, to the more technical problems surrounding the production and marketing of fluid milk for city consumption. In all cases the extension worker has encouraged and demonstrated methods of producing for sale a graded product of high quality.

Extension assistance to associations of fluid-milk producers has been given along three well-defined lines. These are illustrated by the services rendered by the three marketing specialists in Michigan. These services consist, (1) in giving assistance to groups in the organization of locals, in the establishment of an effective administrative organization, in the preparation of proper articles of incorporation and by-laws, and in the selection of competent management. (2) Instruction was given bookkeepers and managers in accounting methods and how to set up a bookkeeping system for a cooperative organization. This instruction was followed by the preparation of a business analysis of the organization and a report, which were rendered to the directors and manager with suggestions

for improvement. In some cases it was necessary to prepare a new system for keeping accounts so that the suggested changes could be initiated. Each of these phases of the work was handled by a specialist. A third specialist prepared economic information for the associations on conditions affecting supply and demand in the various milk markets of Michigan.

The marketing economist and county agents of Oregon assisted producers in the organization of a retail distributors' association and the Corvallis Wholesale Dairy Association, both serving the city of Corvallis. In addition, the milk producers in the vicinity of Eugene, Oreg., were given assistance in the organization of the Eugene Milk Producers' Association. Each of these associations is a trade organization with power to bargain as to the price of milk with the retail and wholesale distributors of the respective cities.

In Virginia the marketing economist, together with county agents and other extension service employees, worked with the executive committee and directors of the Valley of Virginia Cooperative Milk Producers' Association, at Harrisonburg, in working out plans whereby the extension service might be of increasing usefulness to that association in (1) membership relations, (2) plant operation, and (3) better market outlets for milk, cream, condensed milk, skim milk, and powdered milk. A field man was employed who has been responsible for an increase in membership, better morale among members, and a larger volume of business, which have resulted in a decreased cost per unit and correspondingly increased returns to members.

CREAMERY SURVEYS

Assistance given in connection with the location and organization of creameries and the development of the local milk supply was another phase of extension activity in some States.

In Nebraska, the problems confronting the marketing economist were those of surveying the territory for prospective creameries, cheese factories, and milk plants; the advantages and disadvantages of each type of factory; the prospective volume of business; the cow population, and the possibility and probability of the farmers increasing their herds; the marketing facilities for the finished product as compared with those for marketing the raw product; and the cost and size of plant needed, all of which were discussed with producers in the sections where assistance was desired. The communities then, in most cases, made a more complete survey of conditions in the territory. If conditions warranted the building of a plant they proceeded to organize their group. Otherwise, the project was dropped.

Fourteen counties having county agents and nine counties with no county agents were given assistance in the above manner. Those in which plants were built apparently have an excellent opportunity to succeed, while others are satisfied to wait for a more favorable opportunity for organization. Marketing economists are finding that manufacturing men trained by colleges are technical butter makers and plant operators, and not managers. In many cases the managers have not been trained in accounting or business methods. It would seem that the butter makers, if they are to act as managers, should

receive this additional training in conjunction with their technical courses in butter making. Such training is especially needed in some of the smaller creameries, where lack of volume prohibits the employment of both a butter maker and a bookkeeper.

In Minnesota the creamery surveys assumed the same rôle as those in Nebraska, but, unfortunately, the surveys have to determine the best methods of merging small, unwisely located creameries into more efficient operating units.

BUSINESS PRACTICES OF CREAMERIES OBSERVED

The dairy marketing economists of Iowa spent considerable time working directly with local cooperative creameries on problems of business practice connected with marketing. The work consists largely in improving the type of records kept by cooperative creameries. Failure to keep adequate records was assigned as the principal cause of business failures among creameries. A second cause was that the margins taken by local creameries were wider than those at any other stage in the marketing process. To reduce these costs, what the costs are must be known, and this knowledge requires carefully kept accounts.

ACCOUNTING METHODS TAUGHT

The Iowa extension economists have found that little can be accomplished in solving accounting problems by group meetings and little more by accounting schools. The most effective method is through carefully planned personal instruction in installing accounting systems, one or more follow-up visits, and for the first year, assistance in the preparation of annual summaries. In the above manner it is usually possible to train the bookkeeper and to show the directors the benefit of adequate records. The Iowa specialists believe that it is well to spend some time with boards of directors in advance to be assured of their full cooperation before starting the work with them.

The accounting installations do not consist merely in seeing that creameries purchase equipment adapted to their needs and then giving instruction as to where entries should be made; it is just as important to make a careful "cut-off" of the business. This means a detailed valuation of the plant and equipment and other assets of the business and entering these balances on the new books as a foundation for future business transactions. The installation of uniform accounting systems makes possible future comparisons of operating costs, sales expenses, and net returns per unit to the creamery membership. Furthermore, butter makers frequently keep the accounts, and they often move from smaller to larger creameries. No matter how carefully an accounting system may be installed it frequently will fail unless it is carefully checked up during the first year and unless assistance is given in the preparation of the first annual statements. Uniformity of annual statements is quite as important for comparative purposes as uniform accounting systems.

It is the plan of the Iowa Creamery Secretaries' and Managers' Associations to take over the accounting work with creameries and

to plan it on a commercial basis, as soon as the value of and demand for the work have been demonstrated. Present arrangements are to relieve the marketing economists of accounting work with those creameries in which the new system has become familiar to the organization's personnel. The releasing of this group of creameries from supervision will permit the training of a new group. If it is found that a private accounting concern will cooperate and find it profitable to handle this supervision, it may prove desirable to turn over still more of the work to such a concern. This arrangement does not mean that the economist will give up completely supervision of the accounting work, inasmuch as uniform accounting will be necessary as a basis for further studies in marketing for the benefit of the creameries. It will be recognized, of course, that the establishment of a uniform accounting system is only the first step in a larger marketing program with the cooperative creameries. The educational program, through district meetings held with creamery officers, directors, and management, serves as a medium for study of the business organization. Records, however, are but a step in the larger extension program which deals with creamery efficiency.

Numerous other problems in business practice have been given attention in conjunction with the accounting work—for instance: Failure to consider all cash advances as a cost of raw material; disappearance of funds because of overpayment for butterfat; failure to consider as part of the cost of butterfat the deductions made from patrons' checks, which were to be covered by an issue of certificates of indebtedness; failure to make allowance for interest on certificates of indebtedness; failure to consider depreciation as a cost; preparation of income-tax returns; establishing the basis for selling butter to patrons; and keeping butter makers informed as to weighing policies in terminal markets in order to prevent losses through shrinkage, all of which are perplexing problems to some creamery men.

ECONOMIC INFORMATION SUPPLIED

The departments of research in agricultural economics of the Eastern, Central, and New England States have obtained, in cooperation with the marketing agencies, authentic information concerning milk production within the milk sheds surrounding practically all the larger cities. The State extension services, through their marketing economists and production specialists, have assisted the cooperative-marketing associations and city health departments in making clear to dairymen the true situation. In New York State the problem has been one of short milk supply during November. Dairymen are being urged to feed and care for their cows so as to produce the maximum quantity of milk for the shortage period. In other States the problem has been to educate the dairyman to a more uniform monthly production and away from high milk production during the summer months which has made it necessary for consuming areas to carry a heavy surplus at one season and, at another season, to go out of the natural milk shed for their supply of milk.

The solution of these problems requires material changes in the methods used by dairymen in the management of their herds. The dairyman is slow to change his system of production unless he can

be shown that it is distinctly to his advantage to do so. Many have been reached and convinced through meetings called by county agents cooperating with the dairymen's associations, the grange, the farm bureaus, and other organizations. There have been many farmers who belonged to none of these organizations and who could be reached only by personal visits.

The marketing economist in Ohio, in working with four collective fluid-milk bargaining organizations, prepared graphs and charts which picture existing conditions as aids in solving the problems of the associations; assisted in formulating policies adapted to local conditions, in accordance with the laws of the State and laid out along sound economic lines; assisted the organizations in explaining these policies to the members; and attended, with county agents, advisory council and board meetings for the purpose of giving them the benefit of the experiences, problems, and progress of others working along similar lines. In the Dayton, Columbus, and Toledo areas county agents assist the organizations and the State marketing economist in preparing programs for local meetings and supply information concerning local conditions. The various dairy organizations are represented in a central dairy council which meets every three months.

An analysis of the above programs indicates that the economists considered, with the cooperative associations, the best outlets for milk and milk products and the best type of organization to reflect its advantage from these outlets back to the producers. In some States the question to be determined was the relative advantages of sales of whole milk, condensed or evaporated milk, cream for direct consumption, or cream for manufacture of ice cream or butter. Inasmuch as conditions changed continuously, the problem of selecting the best market required keeping in constant touch with all conditions surrounding the industry, through research, business experiences, and production practices, not only within the State but throughout the country as a whole. This could be done best by picturing to the individual organization conditions which affected the status of the commodity group. The above discussion emphasizes the necessity for the marketing economist and the members of the cooperative association knowing the conditions surrounding the marketing of the commodity and then working to achieve the definite goal agreed upon.

GRAIN

The system of marketing grain was considered for many years more efficient than that for marketing any other agricultural product. Recent investigations, however, reveal many unsolved problems in marketing grain. Among those being attacked by marketing economists, State and Federal research departments, and country agricultural agents, are the following.

SELLING ON QUALITY AND GRADE EMPHASIZED

The marketing projects of both spring and winter wheat States emphasized buying and selling on a basis of quality and grade. This work was valuable because of the wide variation in the quality and grade of wheat. The keen competition for grain caused buyers to

overgrade grain, thus breaking the quality differential between producers and destroying the incentive to produce grain of high quality. Also protein is largely due to factors over which the farmer has little control.

Marketing economists, county agents, and farm organizations devoted considerable time to the study of premiums above grade values, as paid at terminal markets, for wheat containing more than the average percentage of protein, and in developing plans whereby wheat might be safely bought and sold on a protein basis. Many farmers have realized that they can ship their wheat in carload lots direct to terminal markets and get full protein premiums for a particular load. Millers have been paying premiums above the grade prices for a number of years on wheat of higher quality. In the natural course of market procedure such premiums come back to the marketing agency that assembles the shipments at country stations. But the protein content of wheat varies between sections, between communities, between farms tributary to the same shipping stations, and even between fields on the same farm and within fields. The variations are due to differences in the temperature, in the amount and time of rainfall, in the richness of the soil, in the kinds of crops previously grown on the land, and in the variety of wheat; to diseases, particularly black stem rust; and to the stage of maturity when wheat is harvested.

At present there is no reliable method of quickly determining the protein content of wheat by physical examination, the determination of protein content requiring a technical chemical test. Furthermore, because of a limited number of bins, the elevator operator finds it necessary to mix the wheat from a number of growers. A delivery of low-protein wheat may, therefore, destroy the premium value of a lot of high-protein wheat. For example, a load of 12 per cent protein wheat would probably carry a premium of 10 cents per bushel, but if it were mixed with a load of wheat containing 10 per cent protein the result would be two loads averaging 11 per cent which ordinarily would have no protein premium value on the market. The average protein content above which premiums are usually paid is 11½ per cent. It has been the task of those attempting to solve the protein premium problem to determine some method of payment for wheat on a protein basis.

Working in cooperation with representatives of the United States Department of Agriculture, of the grain-supervision department at Minneapolis, and of the grain-elevator managers, State marketing economists have worked out the following plan:

As soon as the wheat is ripe, but before it is harvested, the elevator manager and the growers obtain information on the protein content of the wheat in the field. When the wheat is delivered to the elevator a composite sample of each grower's delivery is made up from the small samples taken from each load and kept in an air-tight container. A portion of this sample is then sent to an official testing laboratory in an air-tight can for a protein test. The deliveries of similar protein content are binned and marketed together in three major classes, low, medium, and high. The first payment is made at the time of delivery on the basis of grade values. The final settlement is made for protein premiums after the report on protein test is obtained, on a basis of 75 per cent of protein values at terminal markets at time of delivery. High protein wheat, as determined by the field test, is stored on the farm until protein values are established, thereby deferring the threshing season and the heavy deliveries of

wheat accompanying the flush threshing period, which make it extremely difficult for elevators to keep separate all grades and qualities of wheat. Sometimes the farmer decides to store his wheat rather than to sell it, but in many cases the wheat can not be held in the local elevator. When it can not be held, the grain is shipped to the terminal market, sold, and hedged until such time as the farmer decides to sell his wheat. The farmer is then paid on a grade basis for his wheat, and the hedge is removed, but his protein premiums must be paid for on the basis of the actual date of delivery of the wheat at the terminal market.

The extension of the above program, which varies in degrees in different States, has been handled cooperatively by the marketing economists, county agents, and marketing associations, and is meeting with exceptional response from the wheat growers and terminal marketing agencies. The purpose of this program is to keep those interested in the marketing of wheat informed as to the true value of wheat of different grades and protein content and to encourage the production of wheat of high quality.

BUSINESS ANALYSES MADE

Farmers' grain elevators are constantly confronted with the problem of how far they can safely go in extending credit to their patrons. In recent years this problem has become so acute that the agricultural-economics research departments of several of the more important grain States, cooperating with the extension employees and the grain-elevator managers, have made detailed surveys of the credit problems confronting farmers' elevators. This information, along with comparative information collected on financing, margin operations, general expenses, and auditing analyses of hundreds of elevators showing volume of business, expenses, gross and net margins by commodities, and financial data on side lines, was presented at district and county meetings of officials and managers of cooperative-elevator associations. In reality, it consisted largely of training the leaders in the farmer's-elevator movement.

MARKETING SCHOOL CONDUCTED

Marketing economists frequently hold 1-day county schools for elevator managers, discussing in these schools information resulting from the above studies or topics on management suggested by the managers and county extension agents. In this manner the two groups are brought into closer working relationship, each assisting the other in carrying out their production and marketing programs. Elevators have aided in the programs by increasing the number and variety of farm supplies carried as side lines, such as seeds, fertilizers, feeds, and spraying materials, which assist the county extension agent and the farmers in carrying out their production program. This cooperation also gives the county agent an opportunity to work more closely with the elevator managers in keeping their stockholders informed of the services performed by the elevators for their benefit. Such schools also bring about a better understanding of how elevators can buy cooperatively as a group, as well as a realization of their relative operating efficiency. The bringing out of the relative operating efficiency soon makes the elevator managers and their directorates aware of the weak points in their organization and

quickly enlists the assistance of other managers in overcoming them. Another matter of great interest is how to conduct their annual meetings so as to give the stockholders clear information about their company. Well-conducted annual meetings give the stockholders a definite idea of their responsibility—something it has been found very valuable to have them realize. The annual meeting must bring to the attention of the stockholders and officers the new problems confronting them; it should, if possible, present something new, live, and worth while. A snappy, businesslike meeting gives confidence to all attending, and creates a desire to attend the next annual meeting.

ECONOMIC INFORMATION SUPPLIED

Producers, both individually and collectively, have been furnished information on the factors affecting the grain market and market price trends. This information is sent out monthly in Kansas through the columns of The Kansas Agricultural Situation. In Montana and South Dakota similar publications and circular letters are used. In other States similar information is broadcast from radio stations and published by leading daily, weekly, and trade papers.

Elevator managers, officials, and directors are given the benefit of the information on the factors affecting the price of grain through special circulars to elevator managers and through short courses in grain marketing, every effort being made to reach the producer through his organization.

It has been the purpose of marketing economists to bring about more contacts between the elevator officials and management, and every university department which can serve them; to assist county extension agents and elevator groups to see their opportunities for helpful cooperation; to help elevator managers, directors, and stockholders to find their common interest in and responsibilities for the success of their community elevators; and to help boards of directors in having good records kept and used at their elevators, thus making comparative analysis of their business situations possible as well as improving their business methods and practices.

LIVESTOCK

MARKET TOURS AND GRADING DEMONSTRATIONS CONDUCTED

The one type of extension work in livestock marketing prevailing throughout the Corn Belt States is the marketing tours conducted by county agents and marketing economists, in cooperation with the cooperative livestock sales agencies located in the terminal markets. In these tours, the livestock producers visit the stockyards early in the morning, in time to see the unloading, feeding, grading, and selling. It is here the farmer learns to know the demand side of the market. He may then act as a local leader in conducting grading demonstrations at local shipping points for the benefit of other farmers. The combination of the terminal-market tour and the local grading demonstration has gone far toward furnishing the type and grade of livestock demanded by the consuming public.

MARKET AND ECONOMIC INFORMATION DISSEMINATED

No other group of farmers is provided with a greater fund of market and economic information than the livestock shippers. If interested, practically every livestock shipper can obtain, several times each day, information as to the prices paid for various types and grades of livestock. This information is collected by the market news service of the United States Department of Agriculture and is disseminated by means of radio, telegraphic reports, mimeographed sheets, and through the columns of the daily newspapers.

Nearly every State agricultural college, in cooperation with the United States Department of Agriculture, is preparing all possible economic information on the trends of prices of various types of livestock and the apparent supply and demand for hogs and other types of fat stock. They are also conducting many research studies to determine what markets will afford the producer the highest net returns per 100 pounds under a given set of conditions. Every effort is being made to determine market inefficiencies and then to discover the best means possible to remedy them. Research departments, working in cooperation with extension representatives, are finding many marketing inequalities and are finding means of replacing them by more efficient production and marketing practices.

PROBLEMS OF LIVESTOCK FARMERS STUDIED

Farmers in many of the Corn Belt States are confronted by difficult problems in livestock marketing. In Iowa, county and district meetings have served as a medium through which market business practice has been demonstrated by the three marketing economists to 280 local cooperative-shipping associations in 37 counties, reaching 2,062 leaders, mostly officials of local organizations. The meetings were sponsored by the Iowa Cooperative Livestock Shippers' Association, cooperating with local educational agencies including the county agents. Such meetings serve as an effective medium through which to train local leaders. Training is given the managers of shipping associations in market business practice by introducing improvements in accounting and business practices and administrative efficiency and by acquainting these managers with the broad aspects of the livestock-marketing industry.

Market analysis is another phase of this work. The purpose of market analysis is to determine, after a study of all the factors involved in a particular situation, the needed improvements in marketing methods and how they can be brought about.

In the first series of county meetings a critical study of monthly, annual, and special reports of local associations, as well as of other data relating to their market conditions, was made; for instance, shipping margins to available markets, including cash cost, shrinkage, losses in transit from dead and crippled animals, and trend of cooperative volume were carefully considered. The duties of boards of directors were also fully presented. In the second series, uniform classing and grading were discussed from the standpoint of better salability on local and terminal markets. At these meetings local problems of each association were brought to the attention of its members by its officers and board of directors. In the third series of meetings, hog outlook reports and their importance in helping to

smooth out the hog cycle were studied, as well as uniform classes and grades of stock, and further analyses of the relative advantages of different markets were made.

Through annual and special meetings, the relative operating efficiency of Iowa livestock-shipping associations was presented to officials of 74 associations. The relative cash costs, shrinkage, and losses from dead and crippled animals incurred in shipping to the different markets as well as savings effected through various filling, grading, loading, and shipping methods used at the local shipping-association yards were brought to the attention of members. With the aid of the above material the shipping associations were able to determine more accurately which were the most profitable market outlets for each class and grade of hogs.

Through personal visits, surveys were made of business practices and trend of volume of 227 associations in Iowa. The survey indicated great improvement in the uniformity of records kept by the associations, but much still remains to be done to convince managers, directors, and members of the need of keeping accurate records. A monthly mimeographed publication of timely economic information, entitled "Agricultural Economic Facts," was mailed to managers, directors, and members of shipping associations.

With growing competition from truck operators and increased aggressiveness on the part of packer buyers, the local associations in this State frequently find it difficult to fill cars properly and furnish full-time employment to capable managers.

Extension work in livestock marketing in Ohio has assumed a slightly different rôle from that in Iowa. The marketing economist has followed the plan of extending helpful information which would assist the management in analyzing such problems as cost of operation, farm-to-market losses and volume, and in discovering leaks and suggesting remedies. Assistance was given to associations in analyzing their records so as to obtain facts that might be used to bring about a better-informed membership, and to develop a more active and alert board of directors more inclined to take responsibility for the association's affairs and related policies. Through district, county, and local association meetings of officials and members, uniform bookkeeping and accounting forms have been set up for the State, county, and local associations. With the more general use of such records the task of finding leaks in the individual association will be facilitated. Studies have been made as to how production methods are fitting into the marketing system, with several resulting changes being worked out in cooperation with the production specialists. Studies have also been made of the changing terminal market demands, including selling hogs on a dressing percentage through the National Order Buying Co.

An unusual system of accrediting livestock-shipping associations was developed by the marketing economist of Missouri, who attempted in a different manner to "sell" to the association managements the principles of good business management. The following standards were adopted as necessary for a livestock-shipping association to be accredited:

An approved set of books.
A manager under adequate bond.
An incorporated association.

An annual audit made and a report published or placed on file in the office of the association where it is available for inspection by members.

Adequate sinking funds maintained or commercial insurance provided.

A board of directors which meets at least quarterly and preferably monthly.

An annual election of directors.

Monthly or periodical reports as well as annual reports by manager, prepared on forms provided by the agricultural college, two copies to be filed with the college or its extension agent.

A score of not less than 450 out of a possible 600 points according to a score card agreed upon by the associations, the two leading general farm organizations, and the Producers' Live Stock Commission Association of National Stockyards, East St. Louis, Ill.

In addition to the accrediting of the livestock-shipping associations the marketing economist held, in cooperation with the county agricultural agents and the livestock-shipping associations, a number of short courses in livestock marketing for the benefit of the managers and directors of the shipping associations and leaders in livestock marketing. At these meetings, in addition to an attempt to find the leaks in the local marketing system and to remedy them, the outlook for the various phases of livestock production and marketing was presented to those in attendance so that they might further disseminate the information within their own neighborhoods.

Extension work in livestock marketing in Kansas has assumed two forms. The first has consisted of assistance to local groups in surveying territory for the proper location of livestock-shipping associations, in order to avoid setting up an association with insufficient volume; assistance in properly organizing the association, in setting up a bookkeeping system, and in preparing uniform shipping-association forms. The second consists of assistance to existing cooperative-shipping associations in analyses of available markets and in supplying information on marketing methods and practices.

Throughout the States of Alabama, Georgia, North Carolina, and South Carolina the car-lot method of selling hogs, spring lambs, calves, and to some extent cattle and sheep, has become popular, and has been increasing in volume from year to year. In this type of marketing livestock the county agent or marketing economist assumes a large share of the responsibility of first obtaining sealed bids from prospective buyers for designated grades. It then becomes the duty of the county agent or marketing economist to grade according to strict standards set up for the State, all livestock to be sold. The carload is then shipped to the successful bidder, which, frequently, is a near-by packing plant but may be a commission man or a packer on some northern market. The grading preparatory for sale is done in the presence of the producer. No one thing has done more for the improvement of southern fat stock than the grading demonstrations conducted at these local shipping points.

POULTRY AND EGGS

Many agencies, such as State departments of agriculture, chambers of commerce, railway express companies, Smith-Hughes teachers, creameries, and cooperative associations, have cooperated with extension agencies in conducting egg grading and packing demonstrations, in the analysis of market demands, and in making surveys of production territory to determine the geographical and economi-

cal extent of egg and poultry production, the volume of exports and imports from their trade area at various seasons of the year, transportation facilities and rates, the efficiency of the present marketing machinery, and other factors.

EGG CARS

In many of the Southeastern States marketing economists, county agents, home demonstration agents, and poultry specialists working through merchants, express buyers, cooperative associations, 4-H club markets, curb markets, and county and State farm bureaus, have marketed a large part of the eggs and poultry of these States. Where the marketing problem is handled from a community standpoint the sales are made through the club and curb markets on regular market days. When larger sections are served it is by means of what is known as an egg "pick-up" car. The egg car is scheduled to make five to eight stops. The farmers, who have been advised in advance of prices to be paid for each grade, bring their eggs to the nearest station. The eggs are candled and graded in the presence of the producer and are paid for on a grade basis. This process continues at the several stops made by the egg car until it is loaded to capacity. The car is then billed to the agency having furnished the highest bid.

POULTRY CARS

Live poultry is handled in much the same manner as eggs. When farmers have listed sufficient poultry with extension representatives bids are obtained from northern, eastern, and other markets, in advance of the day set for loading the poultry. The prices to be paid are advertised through local newspapers and circular letters, and through local leaders. The number and time of stops to be made by the poultry car at various railroad stations is also made known. The poultry is then graded, weighed, and paid for either by extension representatives or by some one trained to do the work on the basis of advertised prices. The accuracy with which the extension representatives have graded eggs, chickens, and turkeys has inspired the confidence of buyers from many markets, so that all cars are sold on competitive bids.

The ultimate goal of car-lot shipments is to teach cooperative marketing to the masses of southern people, thereby giving an opportunity to farm-flock producers to sell a graded product in a systematic way.

How well this goal has been achieved is shown by the shipments of live poultry from Georgia. The unorganized farmers of Georgia in 1929 assembled and sold 3,846,159 pounds of live poultry with a shipping-point valuation of $889,203. This quantity compares with 2,645,102 pounds in 1928, 2,662,063 pounds in 1927, and 905,662 pounds in 1926. From these figures it will be noted that the volume of live poultry shipped has been multiplied by four within the last 4-year period.

COOPERATIVE TURKEY POOLS

During the 10 years ended in 1929 there was a large development in the production of turkeys throughout the Mountain States. Prior to the operation of turkey pools, growers in the Northwest marketed

their turkeys by several methods. A large number of producers dressed their turkeys and consigned them to central-market dealers. Another group peddled their turkeys from house to house in near-by consuming centers. Still another group brought their turkeys to market alive and sold them at dressing stations. By far the largest group, however, sold their turkeys dressed to local buyers who repacked them and sent them on to the eastern markets.

After 1923 the number of cooperative turkey pools grew considerably, until in 1929 there were approximately 60 in operation. Most of these turkey pools are the result of the activity of county agents. Through the county agent's office the producers have been asked to estimate the number of birds they would have for sale at some particular marketing time. On the basis of these estimates wholesale buyers have been requested to place bids by grade on the volume indicated for sale. On a certain specified date the producers deliver their turkeys dressed to the buyer at the car. The buyer pays the producer for his turkeys according to his bid. This method of selling turkeys has proved satisfactory in almost every instance. Since turkeys are marketed only during a short period of the year, it is not always practicable for producers to set up a large marketing organization but, working through the county agent's office, they have been able to get better service in marketing their turkey crop and have assured themselves of a satisfactory outlet.

County agents and marketing economists working in cooperation with these 60 turkey pools have realized that a large part of the profit from the sale of turkeys was not being obtained by selling live turkeys and are now dressing their turkeys on farms or at community dressing plants, grading, packing, and selling in car lots. Marketing dressed turkeys in car lots is a practical cooperative-marketing project in which the growers in a county or district, through their local organization, determine approximately the number of turkeys available for sale. Representatives of the growers get in touch with prospective buyers and receive from them sealed bids which are opened at a stated time. The entire number is sold to the highest bidder, who then states the date on which he wishes the dressed birds delivered. The day before delivery is to be made the turkeys are dressed and cooled overnight on the farms. The birds are brought to the central shipping point, weighed, graded, and paid for as they are delivered. The purchaser bears all expenses and assumes all responsibility after the birds are received. The farmer realizes an average of 75 cents per bird for the labor of dressing, which is very satisfactory to most turkey growers.

ASSISTANCE TO ORGANIZATIONS

Early in 1929 management difficulties in the Ohio Poultry Producers' Cooperative Association of northwest Ohio, located at Wauseon, caused the directors of that association to ask the State extension marketing economist and the economic-research department to conduct a study of their association and make recommendations. The study revealed high overhead cost, per unit, due to lack of volume, keen competitive conditions in parts of the territory, passive resistance of members who threatened contract cancellation,

and lack of sufficient aggressiveness on the part of the board of directors to analyze the situation and to determine a policy to be followed. Some of these objections have been overcome by a reorganization of plant personnel, elimination of receiving stations and establishment of house-to-house pick-up trucks, elimination of duplication in management, reduction of plant overhead, an adjustment in sales policy, and active work on the part of the board of directors in improving membership relations and having the members sign a continuous contract cancellable at the end of three years, and yearly thereafter. As a result of these adjustments this association found the year 1929 the most successful in its operation.

In response to a desire on the part of two poultry sections in Michigan to organize a poultry and egg marketing association, the marketing economists attended 60 meetings to discuss the subject of cooperative marketing, its possibilities and limitations. As a result, in one of the sections, a cooperative egg and poultry association for assembling, grading, and selling eggs was organized on a sound economic basis. An interesting departure of this organization is that a part of its sales in the near future will, in all probability, be distributed directly to the housewife by an arrangement made with a city milk distributor. The milk-wagon drivers will be paid a commission for each dozen sold.

At present the State of Connecticut can boast of two small but successful cooperative-marketing associations for poultry and eggs. Both associations invite the marketing economist to attend the regular meetings of the board of directors and render any statistical or advisory service which may be needed. These services during 1929 included assistance in revision of the membership contract and a detailed recommendation to limit sales to one chain store to 40 to 60 per cent of production instead of giving this chain the entire business. This particular chain has since been absorbed by another chain which up to the present time has been unfriendly to buying from cooperative associations. As yet the cooperative has not lost this business, but it seems to be better salesmanship to distribute sales through more than one agency. This close cooperation between the extension service and the associations prevents mistakes before they occur and makes it possible to keep the membership better informed in regard to the activities of the association and its services to members.

Extension work in poultry and egg marketing in Iowa was started August 1, 1927, after a year's research and investigational program relating to the disposal of the products of Iowa farm poultry flocks. As a result of this research work on the part of the experiment station an extension program in poultry and egg marketing was offered to those poultrymen and dealers interested.

Following a survey of the trade area surrounding Farragut, Iowa, the poultrymen decided to organize a cooperative selling agency for eggs and live poultry. The extension service gave assistance to this group in obtaining a proper organization set-up and helped to work out a uniform system of accounting and bookkeeping which would make their records comparable with records of other cooperatives in the State. The association has a satisfied membership of 100 farmers and assets of $1,100, with no outstanding bills.

RESEARCH CONDUCTED

Research work has brought to light the definite need for giving attention to certain market phases. This work is being continued by the staff of the experiment station and is being correlated with the production and marketing programs, which are based on definite findings with regard to marketing problems within the State.

The research work at present consists of surveys of trade areas. The object of these surveys is to get a clear picture of the existing market agencies now serving the trade area, of the condition of public roads leading to the center of the area, of production conditions and the quality of the product being produced, and of the character of farms producing eggs. With these facts analyzed, the marketing program can be set up so as to dispose of the eggs and poultry in the most economical manner and to be of greatest benefit to the most producers within the trade area.

These facts point out the relative importance of the poultry industry over the State and make it possible to furnish each section with the type of market information needed. Such information, as collected by surveys, is of great value to any group contemplating cooperative organization and will aid them in determining whether they should or should not organize. Another concrete example of one type of market information desired by producers was given in 1928, when the cities of New York and Chicago passed ordinances requiring inspection of live and dressed poultry, which affected every seller of poultry in the State of Iowa.

Another association was given aid in its marketing problems which resulted in the elimination of a sizable deficit and in a better satisfied membership. Other cooperatives were assisted in accounting methods, in preparing their annual audit, and in solving general marketing problems confronting the association.

EGG-GRADING DEMONSTRATIONS

During 1929 grading demonstrations were held in 16 counties scattered throughout Iowa. The motto adopted for these grading demonstrations was "A product of good quality is already half sold." This work is closely correlated with the poultry-husbandry section in their breeding, production, and management methods. A check up on communities that have been selling on a grade basis for two or more years indicates that they are receiving approximately 3 cents per dozen more than communities not selling on a grade basis. If this project can be made to cover the sale of Iowa's annual production of 100,000,000 dozen eggs, it will bring many dollars to Iowa farmers. At present approximately 2.5 per cent of Iowa's eggs are purchased on a grade basis.

FRUITS AND VEGETABLES

Extension work in the marketing of fruits and vegetables has been diversified. Perhaps the greatest effort has been expended along the lines of standardization through State and Federal shipping-point inspection. South Carolina, Maryland, Tennessee, Kansas, Virginia, Louisiana, and Arkansas have taken the lead in this direction.

STANDARDIZATION WORK

The fruit and vegetable standardization work in South Carolina seems typical of that conducted in the other States. The three marketing economists of South Carolina, in cooperation with the United States Department of Agriculture, last year supervised the inspection of approximately 2,500 cars of potatoes, asparagus, peaches, beans, peas, cucumbers, carrots, sweetpotatoes, tomatoes, cabbage, and strawberries.

Although shipping-point inspection is a major phase of the standardization program, the inspectors act as field men during the mornings and demonstrate the proper methods of harvesting, grading, packing, and loading. The salaries and expenses of these men are paid by the associations and organizations directly benefited. In the case of asparagus, all inspectors spend each morning on farms helping the growers to develop a full pack of high quality. This work has taken South Carolina asparagus from among the low-quality slack packs on the Philadelphia, Boston, and New York markets, and placed it among the highest-quality asparagus delivered at these markets.

The increase in acreage of asparagus in South Carolina, from 2,500 acres in 1924 to approximately 8,000 acres in 1929 makes necessary greater care in production and marketing methods so as to insure the producer a place on markets where high quality is demanded. Since green asparagus has been more profitable, the association and the marketing economists urge members to cut and ship only green asparagus.

The marketing economists in the various States mentioned emphasized, by means of demonstrations, the proper methods of handling the principal truck and fruit crops. These demonstrations included information as to the proper time, method, and system of harvesting; uniform and attractive full packaging; accurate, uniform size, and quality grading according to Federal-State standards; uniform, attractive containers best suited to the commodity; careful loading of cars in compliance with recommendations of recognized authorities; and the use of the methods in curing, storing, and refrigeration required for each commodity. They included also information as to the relation of all preliminary steps in production, standardization, packaging, and transportation to successful, satisfactory merchandising.

In all parts of the country cooperative marketing of fruits and vegetables seems to be growing in favor as a result of the farmers' work together on the standardization and merchandising programs. Producers of truck crops other than those mentioned are starting to organize for marketing and inspection purposes. The marketing economists see in these smaller organizations the local units for larger selling agencies in the near future. It will be the aim of the marketing economists from now on to merge smaller organizations and to sponsor existing organizations rather than to create new ones unless specifically needed. Nonmember growers are also being advised to sell through some existing organization rather than to form new organizations.

In many of the States training classes for local applicants desiring to obtain positions as deputy inspectors are held in advance of the inspection season. Persons who pass the examinations are licensed to serve as inspectors. In each State it has been the policy of the extension service to work in cooperation with existing cooperative associations and with county agents.

SERVICES TO POTATO GROWERS

The enormous surplus production of early and late potatoes throughout the United States in 1928 brought demands for help from the potato growers. Extension representatives, cooperating with existing organizations and with newly formed groups, made every effort to assist in moving the enormous crop at the best possible price. At first it was attempted to ship only United States No. 1 potatoes and to keep the off grades and culls at home to feed to livestock. Livestock specialists formulated feeding rations for all types of livestock, so that the farmers might feed their surplus potatoes to the best advantage. Michigan potato growers selling through the exchange have always reserved the right to say when their potatoes should be sold. The marketing economists, comparing the farmers' instructions when to sell with actual market prices, proved to many of the farmers that they had been poor guessers as to the best time of the year to sell, and that the association could, if given authority, perform this function to the farmers' advantage.

Tennessee farm organizations cooperating with the State department of markets and the extension service opened a central sales office at Columbia, Tenn., for the purpose of marketing the June crop of potatoes. The crop as a whole was of poor quality and especially hard to sell in the already overcrowded markets, but the central sales agency succeeded in placing the higher grades at prices satisfactory to growers.

The extension service of Kansas has completed a 5-year potato-marketing project in which the attempt was made to have Kansas potatoes marketed in standard packs. Shipping-point inspection under Federal supervision became universal with the passage of the Kansas potato-inspection law. This program resulted in wider distribution, stimulation of f. o. b. sales, fewer rejections, and higher net returns to the growers. Comparative methods of sale for various grades of potatoes were surveyed and analyzed for three years. The analyses showed a higher net return for the better grades. In Kansas the growers selling only a few carloads received a higher net price by selling on the track, while growers who had a large volume of shipments made better returns by selling through agents or directly to known dealers in distant markets. Daily receipts at the Chicago market seemed to be the chief price-determining factors for Kansas midseason potatoes. Information was supplied by the marketing economist to potato growers on factors affecting the season's markets.

In the summer and fall of 1928 the potato producers in the Southern States received the lowest price in the history of potato production in that area. After that disastrous year, the potato

growers of Virginia appealed to the governor of that State to do something for their industry. The governor called into consultation the Virginia Commission on Conservation and Development and also the Federal and State agricultural extension services. At that conference it was decided that the extension service should assist the growers of the State. It was also recognized that the problems of potato producers were not confined within the boundaries of the State but were regional, and that the Virginia producer must cooperate with the potato producers of Maryland, North Carolina, South Carolina, and other competing territories. It was also agreed that the problem was not a temporary one and that all factors representing the industry—bankers, seed dealers, produce distributors, landlords, and fertilizer manufacturers, in addition to producers—had to be taken into consideration.

At a later meeting the extension divisions of Virginia, North Carolina, and Maryland united on a cooperative program which included the Extension Service of the United States Department of Agriculture and the Bureau of Agricultural Economics, of the same department. An interstate committee was selected to establish programs and direct the work. This committee consists of the State directors of extension, an alternate who is usually the chief of the State bureau of markets, a State representative of the potato producers selected by the producers, a representative from each State who is a potato dealer, selected by potato dealers of the State, and three representatives from the United States Department of Agriculture. Four things were decided upon as most necessary to make the potato industry in the South permanently profitable to the producers.

Four subcommittees from each State were selected, one to work on each of these four problems. These subcommittees, or special committees, were designated as follows:

(1) Committee on acreage stabilization and advanced market information.

(2) Committee on speculative credit stabilization.

(3) Committee on substitute crops and enterprises.

(4) Committee on wider market coordination and market practices.

Later a secretary to the interstate committee was selected to further the development of this work in the three States.

This committee decided that, as a first approach, the most necessary thing to do was to gather information relating to the potato industry and interpret it in such a manner that it would be understandable to the growers. It was recognized that the fundamental thing to do was to regulate the supply of potatoes to meet the demand, for when the crop is overproduced its merchandising becomes extremely difficult. The facts regarding the carry-over of the old potato crop and the intentions of the southern grower as to the amount of acreage he intended to plant for the next season were placed before the growers in the Southern States through correspondence and numerous mass meetings. The county agents made all the necessary arrangements for these meetings, advertised them, and had large representative gatherings of growers from their counties present at each meeting.

The growers were not advised to cut their acreage, but the facts regarding the industry were presented to them in an understandable form, and their common sense and intelligence were appealed to. No attempt was made to coerce or intimidate the producer; it was left to his intelligence to make use of the information presented to him.

The Division of Crop and Livestock Estimates of the Bureau of Agricultural Economics and other agencies gathered statistical information with regard to acreage and crop conditions, which was released to producers. The Divisions of Agricultural Finance and Farm Management of the same bureau made studies regarding speculative credit and rotation of crops. The formation of this project brought together the official workers in three important potato-producing States, and also the Extension Service and the Bureau of Agricultural Economics of the United States Department of Agriculture at Washington. The information gathered was usually disseminated through the field workers of the Bureau of Agricultural Economics and county agents.

GEORGIA PEACHES AND THE EXTENSION SERVICE

The extension marketing representatives in Georgia performed a worth-while service to peach growers by obtaining the names of former buyers of Georgia peaches. Every two weeks these buyers were furnished with information as to when the fruit was sprayed and how the crop was developing. The purpose of these letters was to keep buyers thinking of Georgia peaches and to obtain from them suggestions as to the type of package best suited for their particular market and how the practices now being used in grading, assembling, and packing meet market demands. During the peach-marketing season, a number of radio reports and news articles giving methods of canning and serving Georgia peaches were sent out for the purpose of stimulating consumption. During November this same type of work was done in Georgia apples.

MISSOURI STRAWBERRIES STUDIED

As a result of research studies conducted during 1928 and 1929 by the agricultural economics department of the University of Missouri, it was found that the two principal causes of low strawberry prices were (1) lack of a definite acreage policy on the part of growers' organizations and speculative planting by nonfarmers, which cause production and price to move in cycles, and (2) lack of coordination among selling agencies, which sometimes disrupts the market and prevents the adoption of advanced merchandizing methods.

The extension work, therefore, was devoted largely to these broader problems of cooperative fruit marketing, and to an attempt to bring the two principal selling agencies together in a harmonious working agreement. In addition some work was done with officials of four defunct local associations in preparation for shipping the next crop in car-lot quantities. Considerable work was done in cooperation with the strawberry associations and a manufacturer of iceless refrigerators in working out plans for marketing surplus berries by means of a frozen pack which had proved successful in the Pacific

Northwest. A 2-day short course was conducted by the State marketing economist for the benefit of 145 officials representing 42 local associations and 2 sales agencies, all of whom were registered and in regular attendance. This short course was probably an important factor in getting the officials of the local organizations to see their common problems and in bringing about a closer working relationship.

Arkansas fruit and vegetable growers have been given assistance in the organization of five county fruit and vegetable associations during 1929. Frequent trips have been made by the marketing economist to out-of-State organizations to obtain from them the benefit of their past marketing experience and to apply as much as seemed adaptable to Arkansas conditions.

Extension representatives of Mississippi assisted the cooperative-marketing associations of their State in selling approximately 2,000 cars of fruits and vegetables during 1927–28. The cooperative shipments amounted to approximately two-thirds of the total movement from the State.

OREGON PRUNE GROWERS ASSISTED

Three meetings of the dried-prune producers were held in Oregon during March, 1929, the general purpose being to work out and adopt a program for extending the cooperative marketing of prunes along sound and aggressive lines. It was planned, also, to eliminate the confusion that seemed to exist regarding further organization activities. The first meeting was that of a college group, and was called by the director of extension. The second was a joint meeting between the college group and the board of directors of the Pacific Cooperative Prune Exchange, which resulted in the appointment of a committee of nine. This committee met later at Eugene, Oreg., and worked out a program which was unanimously approved and which was supported by the Oregon Cooperative Council. In endeavoring to assist the exchange in carrying out the prune-marketing program, the marketing economist gave some help to the exchange in preliminary work for the organization of new locals and in working out plans for financing based on the use by locals of warehouses licensed under the United States warehouse act. Because of a crop failure at this time, the directors decided to hold the exchange and all activities in abeyance for the year.

COOPERATIVE CANNERIES ORGANIZED

Marketing extension work in the sections that produce canning crops was confined, for the most part, to selling on a quality basis and to the organization of cooperative canning companies.

Several attempts were made to have canning houses buy tomatoes under State-supervised inspection. Such a system would insure to the canner a better product and enable the growers to receive a higher average price for a high-quality product, all of which would tend to encourage the production and marketing of better tomatoes. The success of this movement in the past has been dependent upon the price of tomatoes on the open market. In years when the price obtainable on the open market for an ungraded product is considerably above the contract price for the inspected tomatoes at the canning

house, the grower receives a total net return less than that which he would have received on the open market. The next year the grower invariably refuses to sign a contract to deliver inspected tomatoes. The success of this movement now seems to await a concerted action on the part of commercial canners to refuse to buy uninspected tomatoes.

Production in States growing tomatoes to be shipped as fresh fruit to northern markets has increased to such an extent that at certain seasons a surplus exists. The best means of taking care of this surplus seems to be through a cooperative canning house. Extension employees aided a number of cooperative-shipping associations in the organization of subsidiary associations for the purpose of obtaining and operating canning houses. In most cases the next step has been to develop canning crops other than tomatoes in order to keep the canning house operating during a greater part of the year, thereby reducing the operating cost per unit. Wherever private canning houses can be obtained at a fair price, it has been the usual practice to rent or buy such plants rather than to build new ones.

In other instances the private canning house was reorganized as a cooperative-canning association, in which case the articles of incorporation and by-laws were so formulated as to meet the requirements of the intermediate credit bank, so that the cooperative association would be in a position to borrow funds on warehouse receipts with which to pay growers an advance of 65 to 80 per cent of the value of products delivered to the cooperative-canning house. The remainder of growers' returns is paid as soon as complete sales of canned products have been made.

RESEARCH CONDUCTED

The extension marketing representatives and county agents of the New England States conducted extensive research studies of the market-gardening crops and their marketing in the hope of improving conditions in the larger cities as well as at the roadside markets. Perhaps California conducted more research in the marketing of its fruit and vegetable crops than any other State. These studies were published in bulletin form and distributed to county agents and through them to the producers.

CURB MARKETS ESTABLISHED

Home demonstration agents, cooperating with women's clubs, 4-H clubs. and local chambers of commerce, established many curb markets in the smaller towns and cities of their respective States. In most places the marketing was supervised by an extension representative assisted by a market secretary for each curb market. The farm products marketed consisted of fruits, vegetables, nuts, dressed poultry, eggs, dairy products, fresh pork, cut flowers, bread, cakes, pies, canned goods, relish, soup mixture, preserves, handwork, hats, and household-arts products. All farm products are carefully graded before being offered for sale. In many cases the members signed a contract to deliver for sale only products conforming to the grades and standards set up by the local curb market. The annual sale of prod-

ucts by women exceeded $1,000,000 and furnished local markets and the farm home with a more liberal supply of home-grown farm products.

Many Maryland and Virginia farmers were confronted with problems because of the relocation of the farmers' market in Washington, D. C. The Maryland Extension Service assisted in a survey leading to recommendations for the relocation of this market.

The market situation at Fredericksburg, Va., was also found to require adjustment. There was no grading of farm produce according to any standards. There were no facilities for shipping out surplus produce at times of temporary oversupply. There was no uniformity of prices among growers of the same market quality of product and there was lack of demand among consumers for produce of superior quality. The remedy was found in establishing a curb market with a paid superintendent to standardize both produce and prices and direct the making of shipments out of the local market, either by truck or by express, whenever local gluts occur.

COTTON

The extension service did most of its marketing work in cotton along educational lines, such as selling on grade and staple, encouraging the production of the grade and staple of cotton consumed by mills located within the State, showing the benefits to be derived from the planting of pure seed of superior varieties adapted to the local conditions, from organization of 1-variety communities, cultural improvements, timely picking, improved ginning, the most economical method of farm storage to prevent depreciation and loss of grade from weathering and ground stain, and encouraging producers to become members of the State cooperative cotton-marketing association nearest to them. This association would be the best possible outlet to furnish the marketing facilities for selling cotton on a grade and staple basis, thereby insuring his receiving the full value of his cotton and encouraging him to improve the quality of cotton grown to comply with milling demands within the State.

TOBACCO

Extension employees were active in assisting in the more profitable production and sale of tobacco. A study of the tobacco industry revealed the following handicaps to the most efficient marketing of the annual crop of tobacco.

One of the greatest problems was that of convincing the farmers that their prosperity, so far as tobacco was concerned, depended not on pounds per acre but on quality. An increase in pounds or acres leads to overproduction, with its consequent evil of lower prices; increase in quality tends to curtail production, because the raising of high-quality tobacco requires more labor. Lack of uniformity caused considerable loss. The lack of uniformity was due to mixed variety of seeds, mixtures of old and new seed, variation in size of plants set, and unevenly or poorly prepared and fertilized fields. Many crops, good at cutting time, were ruined in the curing barn. Poor classing was the chief limiting factor in the most efficient sale of tobacco. The principal work of the extension economists was to

teach the production of uniform crops of high-quality tobacco and careful methods of curing and classing. This improvement demanded radical changes in production, in the construction of curing barns, and in methods of treatment while curing.

Many classing demonstrations were held at tobacco warehouses, and arranged so as to show farmers the advantages of careful classing. United States Government grades are becoming more popular and are fast taking the wide price fluctuations out of warehouse selling.

In Wisconsin the State extension service served the tobacco growers of the State in keeping the members of the Northern Wisconsin Cooperative Tobacco Pool informed as to the exact services rendered to tobacco growers of Wisconsin. The marketing economists and county agents, working in cooperation with the department of agricultural economics of the University of Wisconsin, made a business analysis of the organization, in which prices received by members and nonmembers were carefully checked and the results given to the growers. Wisconsin tobacco growers and officials of the association stated frankly that this timely piece of work on the part of the extension service saved the life of the Northern Wisconsin Cooperative Tobacco Pool, which, in 1929, was one of the two successful tobacco cooperatives still in existence.

HAY

The outstanding problem in hay marketing is to demonstrate the value of the Federal hay grades as official standards where shipping-point inspection service has not been established, and to procure inspection for all shipping points where it is desired. Many of the larger hay markets have adopted Federal hay grades as buying standards.

Extension employees held many inspection schools at which inspectors were trained, so that they might qualify as licensed official graders, for shipping-point inspection. Lectures and grading demonstrations were conducted in the leading hay-producing sections in order that farmers might learn to distinguish Federal hay grades. Many times a slight change in production methods means an increase in grade accompanied by a corresponding increase in sales value.

Another means of acquainting farmers with Federal hay grades was educational exhibits at county and State fairs. Increased competition from soybean, alfalfa, and Johnson-grass hays in the Southeastern States made it more difficult for western hay to find ready sale on these markets.

WOOL

In many States extension employees are cooperating with wool growers' cooperative associations and animal husbandry departments in developing a correlated program of production and marketing of wool. The wool pools frequently resolve themselves into small county pools, while in other sections these county pools are being united into state-wide or regional organizations. The larger pools lend themselves to greater sales outlets and better grading, financing, and merchandising.

PURCHASING OF FARM SUPPLIES

Extension representatives cooperated with many smaller cooperative-purchasing associations as well as the large-scale organizations. In the smaller associations they first found out the needs of the county or community and then assisted local farm leaders in determining the type of organization that was best fitted to handle the business transactions and aided in the setting up of the organization. They also determined, through the medium of the experiment station and college research departments, the kinds and combinations of feeds, seeds, fertilizers, spray materials, machinery, and other farm supplies that were best adapted to the needs of farmers in various parts of the State. Recommendations were then made to purchasing organizations, such as grain elevators, livestock-shipping associations, fruit and vegetable associations, poultry associations, dairy associations—in fact, any association handling farm supplies for its members—as to the correct combinations of materials to be purchased and sold to give the producer the greatest benefit per dollar expended.

The larger associations frequently served several States. Committees from the State colleges or universities met and agreed upon the best combination of ingredients for a particular dairy, poultry, or hog feed, or the composition of commercial fertilizer best adapted to particular crops. The county agents in practically every county in the United States are extending to farmers such information and in many cases are able to refer the farmer to a cooperative purchasing association where the supplies may be purchased. No production program is complete unless the materials recommended for economical production are made easily accessible from dependable sources. The county agents and home demonstration workers render an efficient field service to the farmers by keeping them informed concerning the available service of the cooperative-purchasing association.

Extension representatives studied with the officials of the cooperative-purchasing associations the most economical methods of distribution of farm supplies from the manufacturer to the farm. Many improvements were made which cut down the operating and overhead costs of the associations.

EDUCATIONAL METHODS

In assisting cooperative-marketing associations extension programs have followed one of two plans. The first is that of the economist working on a functional basis, that is, the marketing economists assist local or State commodity groups with their organization problems. They determine, for instance, the need for the association, give legal advice as to the correct type of organization to be set up, and prepare membership contracts, articles of incorporation, by-laws, and other legal forms. The rendering of this aid requires a knowledge of State and national cooperative-marketing laws. A second marketing economist gives further assistance by setting up a system of accounts, ledgers, and forms, comparable to those of other organizations in the State. During an association's inception the economist gives periodical assistance in the keeping of rec-

ords and at the end of the year either audits or supervises the auditing of accounts. Different forms are prepared to assist the association in keeping its records uniform.

From the beginning of actual operations, a third marketing economist supplies the association with economic information relative to past, present, and, as far as possible, future market supply and demand for the commodity to be marketed and their influence on price. To supply this information a working knowledge of production and marketing methods in competing areas as well as in foreign countries is necessary. This method of extension work has proved especially valuable to the smaller and local cooperative groups and has been employed in Michigan with splendid results.

The second method in extension activities is that of commodity specialization, such as has been employed in Iowa, Ohio, and several other States. Using this method, the marketing economist spends his time working on the problem of marketing one or more commodities like livestock, grains, fruits and vegetables, dairy products, wool, or eggs and poultry. In specializing on any commodity, the marketing economist multiplies the results of his efforts many times by working with the cooperative marketing groups. A coordination of effort assists the association in marketing its products more effectively, and it also keeps its members informed of existing changes in market demand and how they can assist in meeting that demand. According to the writer's observation, producers are willing to change their methods of production and marketing if they are convinced of the desirability of the change.

Commodity specialization in extension marketing appears to be more logical and likely to produce more effective results both for the cooperative and for the economist than specialization on a functional basis. Greater confidence undoubtedly results from the continuity of effort and identification of an economist with one commodity group than is possible when two or more economists make separate contacts on different problems. The extension employee is more able to familiarize himself with each phase of the conditions and problems surrounding one commodity and its related commodities than if he were compelled to spend that same time collecting and extending information on all farm products. His advice becomes more useful to the cooperative and its membership as he tries to follow a definite, concrete program.

ECONOMIC-NEWS SERVICE

The work described thus far has been an attempt to find solutions for certain definite and practical problems. There is also a need for a better general understanding of economics. To this end the marketing economists, cooperating with the economic-research departments, have attempted to collect, compile, analyze, interpret, and make available economic material from experiment stations, the Bureau of Agricultural Economics of the United States Department of Agriculture, crop and market reporting agencies, and from their own investigations. This information is to be used in support of the extension activities. Such a program recognizes the economic aspects of all production programs and provides that a major part of the economic material be disseminated through current projects.

According to annual reports, 12 or more States are using all or some of the following methods in extending economic information to production specialists, county and home demonstration agents, and through them to farmer groups.

The most generally used method is that of mailing to local groups of farmers or cooperative organizations (according to a list furnished by the county agent) a monthly economic service, called "Farmers' Economic Facts," "Crop and Market Conditions," or something similar.

The purpose of such an economic service is to furnish farm leaders and county agents with monthly summaries of current economic material in which analyses of factors affecting the price of agricultural products are presented, and from this material to point out past relationships between supply and price; to draw general conclusions concerning present and future changes in supply and demand conditions as they appear to affect price tendencies; and to present other economic information of current value to farmers so that they may be in a position to reach sound conclusions as to the best uses to which to devote their land, capital, and effort to obtain the most satisfactory returns.

Other methods used to extend economic information are bulletins written on the economic status of various farm products, and radio lectures which give current market quotations and a summary of crop and market conditions as advertised each day or week as conditions demand. Chart services have been prepared for cooperating specialists, farm leaders, and county agents which present past, present, and anticipated future crop and market conditions of the county, State, and United States, and show where a crop is affected by world market conditions.

Files of statistical material dealing with various agricultural industries in the State are being kept and are proving useful, in furnishing price or production data to farmers or farmers' organizations. Illustrations of the variety of requests supplied are: Variation in egg prices over a period of years in different markets; grain, milk, potato, and other prices as compared with production figures, over a series of years; present prices of feeder pigs, lambs, and cattle in production area; and current receipts by markets of various farm products as compared with receipts for like periods during other crop years.

OUTLOOK REPORTS

The goal of the outlook reports is to assist farmers to plan their operations in advance, that they may obtain greater profits. The crop and market condition reports are issued after the crops are harvested to enable county agents and farmers to study production and price trends so that better marketing may result. The outlook data used by 12 marketing economists cooperating with other college representatives is usually disseminated by means of talks at meetings arranged by county agents and over the radio. Also, mimeographed sheets are distributed to farmers, who are encouraged to keep a file of these reports from year to year that they may study present conditions in their relation to past economic conditions.

A large part of the material used in these outlook meetings is first compiled by the Bureau of Agricultural Economics of the

United States Department of Agriculture during the latter part of December and the first part of January. At the agricultural outlook conferences, held annually in Washington, D. C., during the third full week in January by representatives of the various States and members of the United States Department of Agriculture, this material is analyzed and prepared in suitable form for distribution to the States. There it is further adapted to State and county use. Many of the States plan to keep this information up-to-date throughout the year as well as at the time of the annual outlook meetings.

COOPERATIVE-MARKETING SCHOOLS

The Division of Cooperative Marketing of the Bureau of Agricultural Economics during 1929 cooperated with 10 State colleges of agriculture and their extension services in conducting 3-day cooperative-marketing schools. These schools solicited the active support of the cooperative associations in the States where they were held. They were attended by the directors, officials, and field men of the cooperative-marketing associations, county agents, extension marketing and production specialists, agricultural teachers, bankers, and others interested in the direction of the cooperative movement within their respective States.

The basis of sound progress in marketing is an appreciation of the essential marketing services to be performed by individuals and marketing organizations and a better understanding of the limitations and possibilities of both. The programs at each school, therefore, were designed to present a general picture of national cooperative development and policies and problems as they related to the general marketing problems within the area represented. In some of the 10 States the material developed was later disseminated to local communities by means of 1-day marketing schools. In still other States this material and other material was used in developing 10-lesson schools, which were given at a community center over a period of 10 weeks. On each of five scheduled evenings during the week the person conducting the schools held one meeting. Where day meetings were possible, the lecturer held two meetings a day, running a daytime series of 10 lessons concurrently with the evening series.

In Wisconsin the farmers' institute program is frequently devoted to marketing. There is usually a morning and afternoon meeting for a period of three days. Other States have found that farmers are unfamiliar with marketing methods and market costs and are suspicious of marketing agencies handling their products. To overcome this condition the marketing economists have prepared material for a series of meetings dealing with marketing services, factors affecting prices, and the possibilities and limitations of cooperative marketing. This material is presented to groups of local leaders interested in the cooperative movement, market committees, and directors and officials of cooperative-marketing associations. The county agent arranges for local meetings during the winter season when farmers have more leisure and assists the marketing economist in presenting the material.

COOPERATIVE COUNCILS

Of the four cooperative councils organized or reorganized during 1929, those of Oregon and Mississippi are perhaps the most outstanding in their activities. The Oregon cooperative council was reorganized at Eugene in March, 1929. The membership consists of representatives of the various cooperative-marketing associations of Oregon, the director of extension, and members of the research and extension departments of the agricultural-economics division of the college. The extension marketing economist was elected secretary-treasurer, and the history and new laws were prepared and distributed by the director of extension.

Some of the first activities of the Oregon council were (1) the approval of a program for developing the cooperative marketing of dried prunes, (2) a condensing of the work of the Federated Agricultural Trades of America, (3) a request for a ruling by carriers to ship canned goods and dried fruits in the same car at the rate applying on each in minimum carloads, (4) a request urging the passage of a bill to shorten the minimum loan period of the intermediate credit bank, (5) sponsoring and conducting a 4-day tour of the State as a part of the program of the American Institute of Cooperation, (6) and a request for an extension of the Federal leased wire to Portland in order to obtain market news. In the opinion of the marketing economist of Oregon the good accomplished by the council more than justified the time devoted to it.

The cooperative council of Mississippi is composed of representatives from the Mississippi Extension Service, the agricultural service departments, experiment station, Farm Bureau Federation, Farm Bureau Cotton Association, Staple Cotton Cooperative Association, school of agriculture of Mississippi Agricultural and Mechanical College, State departments of agriculture, education, vocational education, health, and forestry, State plant board, State supervisor of agricultural high schools, and the State bankers' association.

In backing its cooperative-marketing program Mississippi united its agricultural, educational, and business interests, not only in the State but also in each county, where representatives of these interests act as local units of the State cooperative council. The first project of the council was the development of the county farm bureau facilities, so that its services might be increased and improved by further development of cooperative marketing, cooperative financing, and cooperative insurance for the farmer within the counties of Mississippi.

The second project was that of holding a state-wide cooperative-marketing school at Jackson. Without doubt this school was the most widely advertised cooperative-marketing school with which the Division of Cooperative Marketing cooperated in holding, and drew the largest attendance of any State cooperative school so far held. The program provided for the needs of Mississippi agriculture and was an excellent demonstration of what good advertising and cooperation can do for any State.

The cooperative councils of other States so far organized promise equally good results in the future. Such councils should prove ideal organizations with which to cooperate in conducting official extension work in marketing.

VALUE OF EXTENSION WORK TO COOPERATIVES

It is recognized that marketing and production can not be separated; many marketing problems grow out of production policies, and in this field the extension service can render great assistance. Production programs relative to quality, quantity, and time of marketing products, which are designed to coordinate production and marketing, are a legitimate part of extension work. Extension workers promote a standardization of varieties and advocate methods of harvesting, assembling, grading, processing, packaging, transporting, and selling, which will improve the quality of the product.

Production programs should be designed to develop supplies according to market needs, and to divert products of low quality to other channels. This system would aid the cooperative in meeting its marketing problems, would increase the income of the individual member and make for better farm practices.

The extension service can point out needed improvements in marketing services that have not been realized or met by the cooperative associations and study with them the best methods of making these improvements. It may be necessary to change the organization or policies of existing cooperatives. Probably the setting up of exchanges or federations will be necessary, for the performance of additional services that can be rendered by extension workers. An example of assistance given cooperatives by the extension service is found in some of the fluid-milk associations. By following programs promoted by the extension service, the associations met the market needs in periods of short production and handled the surplus in periods of overproduction.

The greatest service that the extension service can render to cooperatives and their members is to determine the type of information that should be given members and prospective members and then to work out methods of dissemination which will insure the members of an accurate, intelligent, and applicable knowledge of the operations and services of the association. There has been considerable difference of opinion among cooperative leaders as to the type, as well as the amount of information that should be given out. Some officers of cooperative associations have been inclined to consider information regarding the association as though it were their own private business instead of that of the members.

To begin with, members of a cooperative association are entitled to have full information concerning the financial status of the organization. The extension employee must be sure that a correct and understandable system of accounting is installed and used by the cooperative, so that its officers may give such information without hesitation. It is possible to issue regularly financial statements that mean nothing or are even misleading. The balance sheet is frequently misinterpreted or is meaningless to many farmers. Marketing economists have already done excellent work in teaching the importance of a uniform and accurate accounting system and should continue to work with cooperatives in bringing about a clearer understanding of the financial status of the association.

The expense of operation and the results obtained by the expenditure should be given. The expense items should include salaries,

general overhead, and functional expense. If this information is given, members are fortified against rumors of extravagance and may analyze the expenditures with a view to constructive criticism. Officials will know about all expenses and can justify their expenditures. Conditions may arise which will result in increased expenses. Members should then be told about the increase and the reasons justifying it; facts should not be concealed or ignored. It has been observed that members are as easily educated to new undertakings and outlays that are profitable as the management if the facts are given them.

Again, the extension service can materially assist both the cooperative and the producer by a clear statement of the legitimate aims and purposes of the cooperative association. Such a statement should be based upon the legitimate improvement that can be made in the marketing services necessarily performed in getting a particular commodity from the producer to consumer. Much emphasis has been placed on better prices, improved bargaining power, the general benefits of cooperation, and the relative degree of organization among farmers and other business interests. But these arguments are too general to mean much. They do not indicate the marketing problems to be solved or the methods to be used in solving them. Better prices, of course, are the objective; but that alone creates too little effort and responsibility, on the part of the individual producer or the management of a cooperative, to render service and make improvement in marketing methods, and places too much faith in the virtue of organization.

The aims, purposes, and services of cooperative effort vary with the commodity. Potential improvements in connection with the marketing of perishable commodities are perhaps standardization and grading, reducing credit losses from irresponsible brokers, and better routing and distribution. For nonperishables, the potential improvements and services are different; unless producers understand, however, their ability to become intelligent members is materially lessened.

In stating these objectives for improved market services, gained as a result of actual grappling with the market problems of cooperatives, the extension forces can be of distinct assistance. Imaginary ills are often suspected by producers, while real ills and possible remedies are not seen. The real state of affairs, however, is being revealed by research in marketing and is disclosing any inefficiencies or abuses. The extension service can promote marketing and production programs that give concrete and accurate information in marketing and teach what are commonly called the principles of cooperation.

The extension service can help members of the association to evaluate the services of their cooperatives and their officials. Inefficient management and ineffectual cooperatives are sometimes supported because members do not recognize inefficiency, while efficient management may sometimes be retired for lack of appreciation of its efficiency. The Federal and State research agencies can set up standards which will enable members to judge their association properly.

An instance in which members undervalued the services rendered by their cooperative association was that of a fluid-milk association whose recently acquired members had little idea of what conditions were at the time of organization. Their general impression was that nonmembers were deriving as much advantage from the association's existence as the member. They forgot, however, that they had not always had a sure and certain market for their milk, whereas they were assured by their association of receiving payment for their milk. Members also were pro rata owners of the association reserves.

Prices paid by cooperative-marketing associations are seldom much higher than those paid nonmembers by private agencies in the same area. This situation is no doubt due to competition and to the fact that similar prices must be paid for similar grades. Both cooperatives and private agencies recognize this system as price fixing. In other words, the existence of a cooperative may make prices higher than they would be if there were no cooperative, but nonmembers get their share of this price improvement. So the extension service and the cooperative must see to it that producers keep in mind other advantages and conveniences in marketing services offered by the association besides that of price.

Extension services can assist cooperatives materially in an educational way. Examples have been given throughout this circular showing how marketing economists, in attempting to unite production and marketing programs, have given unorganized groups as well as cooperatives assistance in approaching production from the marketing viewpoint. After the demands of various markets have been determined, an attempt should be made to shape production of any agricultural commodity so that the product itself is of the desired quality, is harvested at the proper time, is packaged or processed according to the demands of its ultimate market, is transported in the most economical units, and last, but not least, is put into distributing channels which will give the most economical distribution to the consumer. This program, to be successful, must provide that the maximum returns received are reflected back to the producer on a market differential for quality. A spirit of mutual confidence and community of effort between the extension forces and the management and membership of a cooperative will almost insure success for the program of both the extension forces and the cooperative association.

The annual session of the American Institute of Cooperation offers to extension officials and employees a splendid opportunity to familiarize themselves with present-day activities of cooperative marketing associations. It is at these sessions that leaders in the cooperative-marketing movement from the United States and foreign countries meet and discuss their problems and the ways in which they are attempting to solve them. The five annual sessions held have been extremely helpful to those in attendance.

The 4-H boys' and girls' clubs and the boys in vocational schools of agriculture offer a most fertile field in which to implant the principles, practices, possibilities, and limitations of cooperatve marketing. Methods of obtaining economic information are taught, as well as the factors influencing price and their relation to supply and

demand of farm products. Several States have established marketing schools, using high-school buildings as meeting places. The 4-H club members, the vocational boys, and many adults are enrolled to attend as many as 10 lessons given on the same night of the week for a period of 10 weeks. Interest in such classes has been evinced, and such efforts might well be extended.

Every attempt should be made to give local bankers, business men, chambers of commerce, and Rotary and Kiwanis clubs the benefit of information with regard to market conditions affecting commodities produced in their community, county, and State. The agencies mentioned have served several States as mediums through which to distribute economic information and outlook material.

Marketing economists, working in cooperation with the cooperative-marketing associations, college research departments, and the economics teaching staff, can assist materially in developing courses to be given in agricultural economics in the colleges. Students graduating in dairy and animal husbandry, as well as in other production courses, need in their economic background both the marketing and the production viewpoints.

Marketing economists from the Central States met in a 3-day conference at Purdue University, La Fayette, Ind., in April, 1929, for the purpose of discussing methods of extending market information and to discuss methods best adapted to assisting cooperative marketing associations. The exchange of ideas of methods used proved interesting and beneficial to those in attendance. It was the unanimous expression of the delegates from 12 of the 13 Central States that other similar conferences should be held as frequently as possible, in order that the States might keep in closer touch with activities in marketing extension and so that greater effort might be expended in developing methods of conducting extension programs.

One of the greatest needs in extension work in marketing is to have the staff of production specialists study the situation from the marketing viewpoint. Inasmuch as marketing in some form is the ultimate end of all farm products, it seems logical that production should be directed with this in view. More market information should, therefore, be given in the production courses taught in colleges so that future graduates will be market-minded as well as production-minded. The farmer must sooner or later be taught that the price he may receive for his product will depend upon the quantity of a given grade and quality offered for sale, either at different seasons or continuously, and the relative advantage with which the consumer can select and purchase a substitute commodity. For example, fruits coming on the market at the same time of year offer to the consumer a relatively easy shift from any fruit which may be selling too high in comparison with other fruits, so that price is frequently not dependent upon the scarcity of that particular commodity but upon the relative supply of all substitute commodities and the ease with which the consumer can shift from one to the other. The consumer-demand studies being conducted by the United States Department of Agriculture, in cooperation with many State institutions, should give extension forces much information to be applied to the production and marketing program.

More can be done to cut down total marketing costs; that is, costs of production, assembling, and preparing for shipment. In distribution, in the larger cities, the presence of many small, inefficient retailers has added materially to the total costs. Little immediate reduction may be expected in the cost of transportation from the producer to the consumer, however, as competition is already keen and has tended to eliminate inequalities. Opportunities to lower the costs in the middle of the road to market are, apparently, less than at either end. The extension service should cooperate fully with the research departments in considering the various steps in marketing and locating the out-of-line costs. Once this information is obtained it will be found usually that cooperative effort will be an aid to producers in obtaining for their products the highest possible net returns. The efforts of the extension group will be strengthened by assisting county or State groups in developing the type of cooperative-marketing association best fitted to market the commodity which is offered for sale.

Members of cooperatives should take advantage of the educational features offered by the extension service and their cooperative associations. The outlook material on probable future market demands being disseminated by both the extension service and the cooperative is invaluable in that it enables the producers to plan their production programs more intelligently. This service should be extended as fast as men are available to do the work. The value and importance of such information should be emphasized to producers so that they may realize that their marketing problems can be solved only in coordination with their production programs.

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